FenceLab Project

(b)(6);(b)(7)(C)
FenceLab Project Manager

30 April 2007

FenceLab Project

Project Manager (b)(6);(b)(7)(C)

Project Manager's Assessment		
Category	**Status**	**Assessment Summary**
Overall	Y	PoP is only 8 weeks. The FenceLab needs to be ongoing to continue to test, evaluate, develop, and integrate fencing solutions.
Scope	Y	Scope doesn't allow testing of (b) (7)(E) integration
Budget	G	
Schedule	G	
Technical	G	Requirements have been defined in PWS

Major Milestones:

	Baseline	Estimate	Actual
•Contract to Boeing	12/29/06	3/16/07	3/16/07
•IAA with Sandia	1/19/07	2/23/07	2/27/07
•Start T&E Fence Barrier at (b) (7)(E)	1/29/07	4/9/07	4/16/07
•T&E Interim (test results) Report	2/28/07	5/11/07	

Performance Metrics:

•Selected candidate barriers/fences solution to satisfy performance requirements and goals in PWS

Total Project Cost: $2.675 M

Major Deliverables:

• Assessments of eight types of barriers/fences (2 government solutions & 6 COTS solutions)

• Interim Test & Evaluation Report of barriers/fences candidates

Fence Lab Evaluation Criteria

- **The 19 Point Performance Criteria for Fence Lab were established in December 2006 to establish minimal standards for accepting fence/barriers and to establish metrics for evaluating candidates**
- **Fence Lab Performance Criteria comprised of 19 Requirements and Goals (that cover design, durability, acquisition, cost, production, and delivery)**
- **19 Fence Lab Performance Criteria include:**
  - Minimizing Cost (original threshold was $1.3 million per mile)
  - Maximizing Deployment Rate (original threshold was 1 mile per day)
  - (b) (7)(E)
  - (b) (7)(E)
  - Applicable to wide range of environmental conditions on SW Border
  - Comprised of COTS materials and parts
  - Maximizing life expectancy and minimizing maintenance/repairs
- **15 COTS designs originally submitted by candidates from Boeing Suppliers Database.**
- **6 of the 15 candidates were selected for testing and evaluation at (b) (7)(E) along with 3 government developed solutions).**
- **3 government developed solutions include CBP (b) (7)(E) (b) (7)(E)**

Performance Criteria

Performance Criteria		
#	Performance Requirements	Verification
1	(b) (7)(E)	**Test**
2		**Analysis**
3		**Demo/Analysis**
4		**Test/Analysis**
5		**Demo/Analysis**
6		**Analysis**
7		**Analysis**

Performance Criteria

Performance Criteria		
#	Performance Goals	Verification
1	(b) (7)(E)	**Analysis**
2		**Analysis**
3		**Inspection**
4		**Demo/Analysis/ Inspection**
5		**Analysis**
6		**Analysis**
7		**Analysis**
8		**Analysis**
9		**Demo/Analysis/ Inspection**
10		**Test/Analysis**
11		**Analysis**
12		**Analysis**

Test and Evaluation Results

Test and Evaluation Results Available on May 11

- Boeing to issue Interim “Test & Evaluation” Report on May 11 which evaluates all 9 candidates against 19 Point Performance Criteria.
- Fence Lab to attach appendices to address other considerations not covered by Boeing deliverable.
- The Boeing Interim Report and Fence Lab Appendices combined together will be referred to as the Fence Lab “Buyer’s Guide” and placed in the Tool Box to assist decision makers.

Roles, Responsibilities, & Schedule

Roles, Responsibilities, and Schedule

- Boeing Contract Awarded on March 16, 2007 and provided 8 weeks to construct, test, and evaluate 9 different fence/barriers by May 11, 2007
- (b) (7)(E) selected for test facility and to provide crash testing and SMEs
  - Four crash tests have been performed to-date
  - (b) (7)(E) is the 5th (scheduled to be crashed on 4/30)
  - Four more additional fence/barriers to be crashed by 5/10
- (b) (7)(E) is subcontracted to (b) (7)(E), who are also providing SMEs
- (b) (7)(E) representatives from Border Patrol, (b) (7)(E), Boeing, & SBInet and involved in vulnerabilities, maintenance, and requirements analysis.
- The Fence Lab Project Manager is (b)(6);(b)(7)(C)

SBI*net* Fence Lab – Preliminary Findings

Fence Lab Preliminary Findings

- Fence Lab has identified several fence/barrier candidates that are low cost (under $1.3 M/mile), quickly deployable (1 mile/day), and high performing…
- …But One Design will not Satisfy All Requirements/Goals for SW Border
- Each Sector/Station has different requirements based on Local Needs
  - (b) (7)(E)
- Each Fence/Barrier has pros/cons and strengths/weaknesses that need to be matched/assessed against local needs
- The Fence Lab "Buyers Guide" will attempt to assist decision makers with information to match fence/barriers to local needs

Preliminary Findings (cont)

	Ranked (1-15) Test Station Cost	Value (1-10) Test Station Requirements	Ranked (1-15) Deployability Cost/mile	Ranked (1-15) Producability Miles/day	Ranked (1-15) DP Factor	Value (1-10) Intangible Cost	Final Score
1	(b) (7)(E)		(b) (7)(E)				
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

SBI*net* Fence Lab – Washington Group Intl.

- **Supplier Provides** (b)(3)
- Fence Materials
  - (b)(3)
- Fence Height: 11 ft. 4 ½ in.
- Producability
  - Proprietary Design (License Fee + Royalty)
  - Estimated Cost Per Mile - (b)(3)
- Deployability
  - Estimated Deployment **0.5 Miles/Day**:
  - Crew Size on Border: **100**
- Utilizes local fill inside of (b)(3) sections

(b)(3)

SBI*net* Fence Lab – Spanco Building Systems

- **Supplier Provides** (b)(3)
  - Fence Material
    - (b)(3)
  - Fence Height: 12 ft.
  - Producability
    - Non-Proprietary Design
    - Estimated Cost Per Mile - (b)(3)
  - Deployability
    - Estimated at **1/mile per day**
    - Crew Size on Boarder: **9 crew** members and 3 supervisors
- (b) (7)(E)

(b)(3)

SBI*net* Fence Lab – Sloan Security Fencing

- **Supplier Provides a Chain Link Fence with Cable barrier in-line with the Fence.**
  - Fence Material
    - (b)(3)
  - Fence Height: 12 ft.
  - Producability
    - Proprietary Design (Interested in license agreement with a fee reasonable with industry standards)
    - Estimated Cost Per Mile - (b)(3)
  - Deployability
    - Estimated at **1mile/day**
    - Crew Size on Boarder: **95 people**
  - (b) (7)(E)

(b)(3)

SBI*net* Fence Lab – Long Fence

- **Supplier Provides a Chain Link Fence with 3-Cable barrier in-line with the Fence.**
  - Fence Material
    - (b)(3)
  - Producability
    - Non Proprietary Design
    - Estimated Cost Per Mile - (b)(3)
  - Deployability
    - Estimated at **1/mile per day**
    - Crew Size on Boarder ~**100 people**
- (b) (7)(E)

(b)(3)

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SBI*net* Fence Lab – (b) (7)(E)

- **Supplier Provides Bollard Design and a Fabric Mesh Fence**
  - Fence Materials
    - (b)(3)
  - Fence Height: 10 ft. 6 in.
  - Producability
    - (b)(3)
    - Estimated Cost Per Mile - (b)(3)
  - Deployability
    - Estimated at **1 mile/day**
    - Crew Size on Boarder ~**30 people**

(b)(3)

SBI*net* Fence Lab – Safeguard Technology

- **Supplier Provides** (b)(3)
  - Fence Materials
    - (b)(3)
  - Producability
    - Estimated Cost Per Mile - (b)(3)
  - Deployability
    - Estimated deployment **1.06 mile/day**
    - Crew Size on Boarder ~**126 people**

(b)(3)

Government Solution Plan - (b) (7)(E)

- **Design Solution presented by** (b) (7)(E) (b) (7)(E)
- **Estimated Cost per mile** (b)(3)

(b) (7)(E)

Government Provided Sketch

(b)(3)

(b)(3) **Provided Sketch**

Components being fabricated

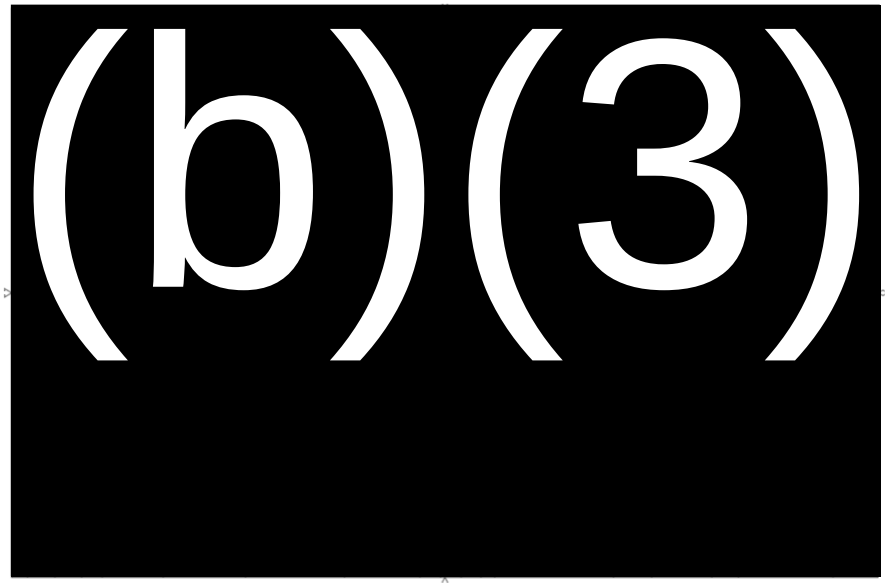
Government Solution Plan - (b) (7)(E) Barrier

- Local General Contractor, Bryan Construction to fabricate/install/tear-down/remove
- Cost for Test Section: (b)(3)
- Cost/Mile: In development
- Deployability
  - Miles Per Day: In development
  - Crew Size at Border: In development
- This design will be tested as it is deployed in the field

(b) (7)(E)

Government Solution Plan – (b) (7)(E) Barrier

- Local General Contractor, Bryan Construction to fabricate, install, tear-down, and remove
- Cost Per Mile
- Deployability
  - Miles Per Day: ?
  - Crew Size at Border - ?
- This (b) (7)(E) design will be tested as it is deployed in the field



Results to Date Summary

	CRITERIA								
								Border Install	
	DESIGN	MANUFACTURER	TYPE OF FENCE	COST / MILE	Disable Vehicle	Deployment	Crew Size Border	US Side	Toward Border
1	(b)(3) (b) (7)(E)								
2									
3									
4									

Early Deployment Opportunities – Phase 1

Pre-acquisition/design phase for PF225 Phase 1 scheduled from May – Sept 07 will utilize Fence Lab designs where possible as well as existing construction contracts.

Initial deployment opportunities:

Tucson sector – planned fence segments:

- (b) (7)(E)

El Paso sector – planned fence segments:

- (b) (7)(E)

PF 225 Acquisition Strategy - Phase 2

- **Strategy geared to shorten design phase and enable sooner construction start dates**

•Scalable

- Accommodate multiple projects ranging in project size and type
  - Fence (Primary, Secondary, etc…)
  - Roads and Fence
  - Roads, Fence and Lights
  - Other horizontal construction requirements
- Accommodate growth in mission requirements

•Prevent Single Point of Failure

- Multiple experienced capable contractors
- Primarily sector based contracts, but capable of executing anywhere in Southwestern region
  - Provides redundant capability/serves as contingency

•Contract Type

- Indefinite Delivery Indefinite Quantity Multiple Award Task Order Contracts (MATOCs)
  - On board “Ready to Work” pool of highly qualified contractors
  - Specific requirements are defined at the task order level
  - Provides for competition on all work
    - Primarily Firm Fixed Price
    - Primarily “Best Value”
  - Fence Lab results may be included within individual task orders